

CLAIMS

What is claimed is:

1. A method of correcting a tilt in a disc drive, the method comprising:
 - detecting a tilt of a disc loaded in the disc drive;
 - searching a memory in the disc drive for a tilt angle for a recording or reproducing sector of the disc in which the tilt is detected;
 - calculating a tilt angle for the recording or reproducing sector based on the detected tilt of the disc if no tilt angle is found in the memory;
 - correcting the tilt of the disc; and
 - storing the calculated tilt angle in the memory so that the calculated tilt angle is used for the recording or reproducing sector,wherein if a tilt angle is found in the memory, the tilt of the disc is corrected using the found tilt angle, and if the tilt angle is not found in the memory, the tilt of the disc is corrected using the calculated tilt angle.
2. The method of claim 1, wherein the recording or reproducing sector of the disc is based on information on the position of a pickup based on the number of pulses for driving a motor for controlling movement of the pickup in the disc drive.
3. An apparatus for correcting a tilt of a disc placed in a disc drive, the apparatus comprising:
 - a pickup that radiates light onto the disc;
 - a tilt detector that detects a tilt of the disc using the pickup;
 - a motor that drives the pickup to correct the tilt of the disc;
 - a memory that stores a tilt angle for each of the plurality of recording and reproducing sectors of the disc; and
 - a controller that, if the tilt of the disc is detected, searches the memory for the tilt angle for the recording or reproducing sector of the disc wherein the pickup is currently positioned, and controls driving of the motor using the searched tilt angle.
4. The apparatus of claim 3, wherein if the tilt angle is not found in the memory, the controller calculates the tilt angle for the recording or reproducing sector of the disc wherein the pickup is currently positioned based on the tilt of the disc, corrects the tilt of the disc using the calculated tilt angle, and stores the calculated tilt angle in the memory.

5. An apparatus for correcting a tilt of a disc placed in a disc drive, the apparatus comprising:

- a pickup that radiates light onto the disc;
- a pickup moving unit that moves the pickup in a radial direction of the disc;
- a tilt detector that detects the tilt of the disc using the pickup;
- a first motor that drives the pickup to correct the tilt of the disc;
- a memory that stores a tilt angle for each recording or reproducing sector of the disc based on the position information of the pickup and the position information of the pickup;

and

a controller that detects the position information of the pickup based on the number of pulses for driving a second motor in the pickup moving unit and stores the position information in the memory, and if the tilt of the disc is detected by the tilt detector, searches the memory for a tilt angle for a sector of the disc from which the tilt is detected and controls driving of the first motor using the searched tilt angle.

6. The apparatus of claim 5, wherein if the tilt angle is not found in the memory, the controller calculates a tilt angle for the sector of the disc from which the tilt is detected, corrects the tilt of the disc, and stores the calculated tilt angle in the memory.

7. A computer readable medium encoded with processing instructions for implementing a method of correcting a tilt in a disc drive, the method comprising:

- detecting a tilt of a disc loaded in the disc drive;
- searching a memory in the disc drive for a tilt angle for a recording or reproducing sector of the disc in which the tilt is detected;
- calculating a tilt angle for the recording or reproducing sector based on the detected tilt of the disc if no tilt angle is found in the memory;
- correcting the tilt of the disc; and
- storing the calculated tilt angle in the memory so that the calculated tilt angle is used for the recording or reproducing sector,

wherein if the tilt angle is found in the memory, the tilt of the disc is corrected using the found tilt angle, and if the tilt angle is not found in the memory, the tilt of the disc is corrected using the calculated tilt angle.

8. The computer readable medium of claim 7, wherein the recording or reproducing sector of the disc is based on information on the position of a pickup based on the number of pulses for driving a motor for controlling movement of the pickup in the disc drive.

9. A method for driving a stepping motor, comprising:
 - reading information on a number of required driving pulses corresponding to a position of a pickup;
 - calculating a number of driving pulses to be generated based on the number of driving pulses required and a number of driving pulses previously generated;
 - generating the calculated number of driving pulses; and
 - storing the calculated number of driving pulses corresponding to the position of pickup.
10. The method according to claim 9, wherein the position of the pickup corresponds to one of a plurality of recording and reproducing sectors of a disc.
11. The method according to claim 10, wherein the stepping motor is used to correct a tilt of the disc.
12. A computer readable medium encoded with processing instructions for implementing a method for driving a stepping motor, the method comprising:
 - reading information on a number of required driving pulses corresponding to a position of a pickup;
 - calculating a number of driving pulses to be generated based on the number of driving pulses required and a number of driving pulses previously generated;
 - generating the calculated number of driving pulses; and
 - storing the calculated number of driving pulses corresponding to the position of pickup.
13. The computer readable medium as in claim 12, wherein the position of the pickup corresponds to one of a plurality of recording and reproducing sectors of a disc.
14. The computer readable medium as in claim 13, wherein the stepping motor is used to correct a tilt of the disc.